

MD 115 IS ASSUMED TO RUN  
IN AN EAST-WEST DIRECTION

8  
LEFT TURN  
YIELD ON GREEN  
R10-12  
30 in. x 36 in.

9,10  
WEEDWOOD  
D3-2  
Variable x 16 in.

11  
MUNCASTER HILL ROAD  
D-3(1)  
Variable x 16 in.

12,15  
NEW  
W3-3  
48 in. x 48 in.  
"NEW"  
30 in. x 30 in.  
And Flags

13  
WEST  
M3-4  
30 in. x 15 in.  
M1-5  
48 in. x 36 in.  
M6-1  
30 in. x 24 in.

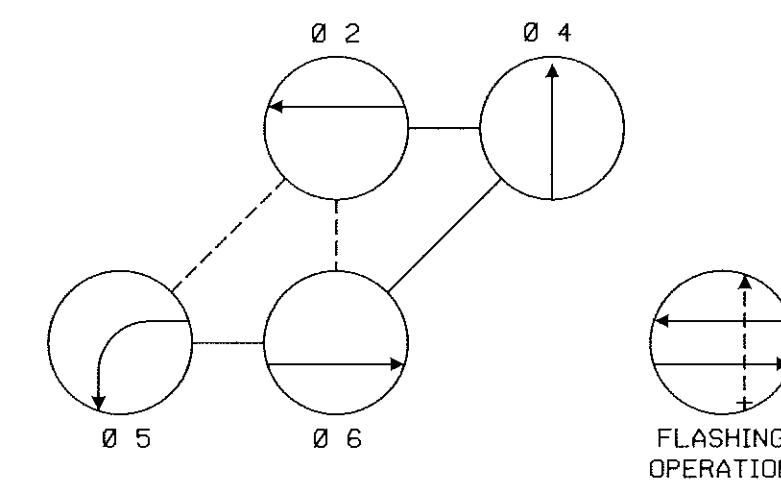
ASSOCIATED  
SHIELD ASSEMBLY  
48 in. x 75 in.

14  
EAST  
M3-2  
24 in. x 12 in.  
M1-5  
24 in. x 30 in.  
M6-1  
21 in. x 15 in.

## SIGNAL HEADS

1  
12" / 8"  
2  
12"  
3-7  
12"

## NEMA PHASING



## PHASING NOTES:

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.

## CONSTRUCTION DETAILS

- INSTALL 21 FT. STEEL POLE WITH TWIN 50 FT. AND 50 FT. MAST ARMS, SIGNAL HEADS, AND SIGNS (NOTE: 1-3 IN AND 1-2 IN. SCHEDULE 80, 90 DEGREE ANGLE PVC CONDUIT BENDS, 4- 2" x 90" ANCHOR BOLTS)
- INSTALL 27 FT. STEEL POLE WITH 60 FT. MAST ARM, SIGNAL HEADS, AND SIGNS AND 20 FT. STREET LIGHTING ARM WITH 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE (NOTE: 1-3 IN. SCHEDULE 80, 90 DEGREE ANGLE PVC CONDUIT BEND, 4-2" x 90" ANCHOR BOLTS)
- INSTALL 6 FT. X 30 FT. QUADRUPOLE LOOP DETECTOR (3-6-3 TURNS) ENCASED IN 1/4 IN. FLEXIBLE TUBING.
- INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- INSTALL 1 IN. GALVANIZED STEEL ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- INSTALL ELECTRICAL HANDHOLE.
- INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
- INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED.
- INSTALL 24 IN. WHITE THERMOPLASTIC MARKING TAPE (STOPLINE).
- INSTALL GROUND MOUNTED SIGN.
- INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED.
- PROPOSED OVERHEAD FEED.
- INSTALL 6 FT. X 6 FT. LOOP DETECTOR (4 TURNS)
- REMOVE EXISTING SIGN.
- INSTALL CONTROLLER HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

## ROADWAY LEGEND

..... FUTURE CONSTRUCTION  
—— EXISTING GEOMETRY

## UTILITY LEGEND

— A — AERIAL CABLE  
— E — ELECTRICAL  
— T — TELEPHONE  
— G — GAS  
— S — SEWER  
— W — WATER  
— TV — CABLE TV

**RK & K**  
RUMMEL, KLEPPER  
& KAHL, LLP  
CONSULTING ENGINEERS

81 MOSHER STREET  
BALTIMORE, MARYLAND 21217

TEL: (410) 728-2900 FAX: (410) 383-3270

## GENERAL NOTES

1. GEOMETRICS AND GRADES SHALL BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT.
2. LOOP DETECTORS AND CONDUITS SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO VERIFY THE LOCATION OF ALL UTILITIES.
4. ALL LUMINAIRES MUST BE FULL CUT OFF.
5. PAVEMENT MARKINGS DETAILED ARE TO BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH SHA STANDARDS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE, EXCLUDING INTERCONNECT, TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
7. DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES. THE CONTRACTOR SHALL RUN THE INTERCONNECT CABLE INTO THE BASE OF EACH CABINET AND PROPERLY TAG THE CABLE. CONTACT MR. BOB GONZALES AT (301) 217-2182 SEVENTY TWO HOURS IN ADVANCE OF THE INTENDED WORK.

REVISIONS:		APPROVALS:		MDOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE 15011502.84	
		 CHIEF SIGNAL DESIGN SECTION D. CARPIAS		DRAWN BY: JAB/BSH	
		ASST. DISTRICT ENGINEER TRAFFIC		DES. BY: JAB/BSH	
		 3/8/99		CHK. BY: DLA	
		CHIEF TRAFFIC ENGINEERING DESIGN DIVISION		DATE: JANUARY, 1999 F.A.P. NO. N/A	
		 3/10/99		SCALE: 1"=20' S.H.A. NO. AW277 A55/B55	
		DIRECTOR OFFICE OF TRAFFIC & SAFETY		TS/STD. NO.: 3820	
				SHEET NO. 1 OF 3	